I. Components of a Perinatal HIV Prevention Program

Overview ("Cascade") of Components of a Perinatal Prevention Program
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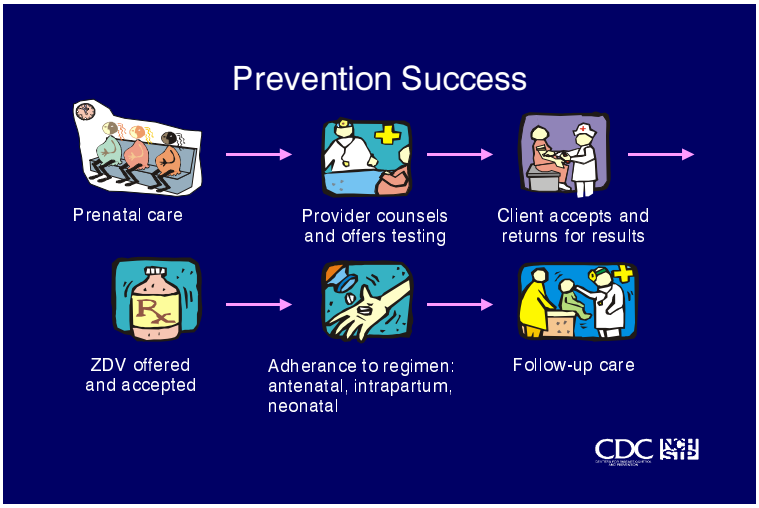
As a way of organizing our thinking and planning, I would like to provide a general framework in which to catalog our knowledge about interventions to prevent perinatal transmission and to think about the problem as we move through the information.



This overhead shows a cascade of events or steps that must be taken to accomplish the intervention. The short-course regimen definitely represents something that is more feasible and affordable in developing countries than the long-course regimen that is used in the United States. However, there are still a number of steps that must be taken for a case of perinatal HIV infection to be prevented.

The first step that has to take place is that the woman must enter prenatal care, which depends on a number of things, including her access to such care. Is it available to her? Is it affordable to her? Does she have transportation? What is she going to do with her other children while she is going to the clinic? Assuming that she has access to a clinic, will she utilize the clinic? Does she consider it important enough in her life to spend the time to actually get prenatal care? These are some of the factors that will be important for a woman to get into prenatal care.

The second step that must take place is that the provider must offer the woman counseling and testing for HIV. This depends on the health care provider's knowledge, training, beliefs, attitudes, and practices. Health care providers also must have the resources

to carry out the intervention.

Once the counseling and testing is offered, will the woman accept the testing, and will she return for her test results? Returning for test results has been seen as a major problem in all areas, in the United States as well as in developing countries, and I think it deserves some consideration and discussion. Whether or not she accepts the testing and returns for results depends on a number of factors: Can she afford the test? Are there financial difficulties involved? What are the logistics? Does she have to go to a different clinic or a different area to get the test? Has she had a previous test and therefore does not want to get another one? What is her perceived need for the test? Does she consider herself to be at risk? Is this something that is important to her? Is she afraid to take a test? Is she afraid to accept the reality of HIV? And, finally, I think stigma and discrimination play a major role. What happens when she goes home and has to disclose her result to her partner?

Once she decides to take the test and actually gets her result, will zidovudine (ZDV or AZT) be offered if she is found to be HIV infected, and will she adhere to medication? This depends on a number of factors: Does the health care provider have the skills and knowledge to administer the medicine? Is the medicine available? Can the woman afford it? Is she able to access the distribution system?

Finally, assuming she actually gets the medicine, will she be able to take it? Can she fit it into her daily schedule? Will taking the medication reveal her HIV status? Does she have financial barriers? These and other similar questions will need to be addressed.

Each one of these steps raises a number of issues that must be considered. Not all of the questions have been answered. Many of them remain to be studied and to be worked out as these programs are put into place.

In addition to the "cascade" and steps to be taken to implement the intervention, there are a number of other issues to be considered. First, has policy been developed and accepted at all levels? What is the national commitment to such an intervention? Has the Ministry of Health recommended it? How has it been accepted at the local level? Are local authorities ready to implement this? What is happening at the institutional level? And, finally, what is happening within the community? Is this something that the community wants and is demanding?

Health care delivery systems and infrastructures are also important. Are the clinics available? What is the clinic flow? Are these very busy clinics that are going to have a difficult time fitting in yet one more service? Are pharmacies available to distribute the medicine? How are they going to do that? Are laboratories in place? Are there testing equipment, testing resources, and trained personnel for the clinics, the pharmacy, and the labs?

What about the health care providers themselves? Will they need training? Are they skilled? Do they have materials and resources available to them to carry out the intervention? Do they have the time to do it? Is reimbursement of the health care provider

an issue as well?

And, finally, regarding the pregnant woman, what is her knowledge level, what is her acceptance, and what is her ability to adhere to the regimen? All of these factors must be kept in mind and addressed as we develop perinatal HIV interventions.